May 1, 1956

25X1A

PROGRESS REPORT #1

This first progress report on SP 1914 is written four months from the beginning of activity on the Bakersfield operation. Hereafter, progress reports will be submitted on a six weeks basis. As of this date, the project has the following status:

1. The fuselage for first Bakersfield airplane leaves the jig on May 18, 1956, one week ahead of schedule.

2. First set of wings are pulled from jigs and now in tank seal.

3. Six aft fuselage assemblies have been delivered to Burbank for SP 1913.

4. Final assembly operations have begun on the aft fuselage for the first Bakersfield airplane.

25X1A 5. [redacted] has been designed and is now released to the shop.

AIRCRAFT -

The twenty nine aircraft to be built at Bakersfield on SP 1914 are serial numbers 361 through 389. These will be identical to aircraft 341 through 360 built for SP 1914; the only changes being for special equipment additions if necessary. The schedule for these twenty nine aircraft is shown in Figure 1.

EQUIPMENT SUMMARY -

The equipment being provided for these aircraft is shown in Figure 2. The availability dates on this table are for SP 1913; new delivery dates for the SP 1914 equipment must be negotiated. Note on this table that the equipment combinations derived for these aircraft total in one instance to 913 pounds. This is over double the original design weight allotment of 450 pounds upon which the airplane performance has been predicted. System II in particular has contributed to this increase, since it has grown three times its original 60 pound estimate. The following table indicates its present configuration which is obviously completely contrary to our former plans.

FOLLOW-ON CONTRACT

ENGINEERING MASTER SCHEDULE

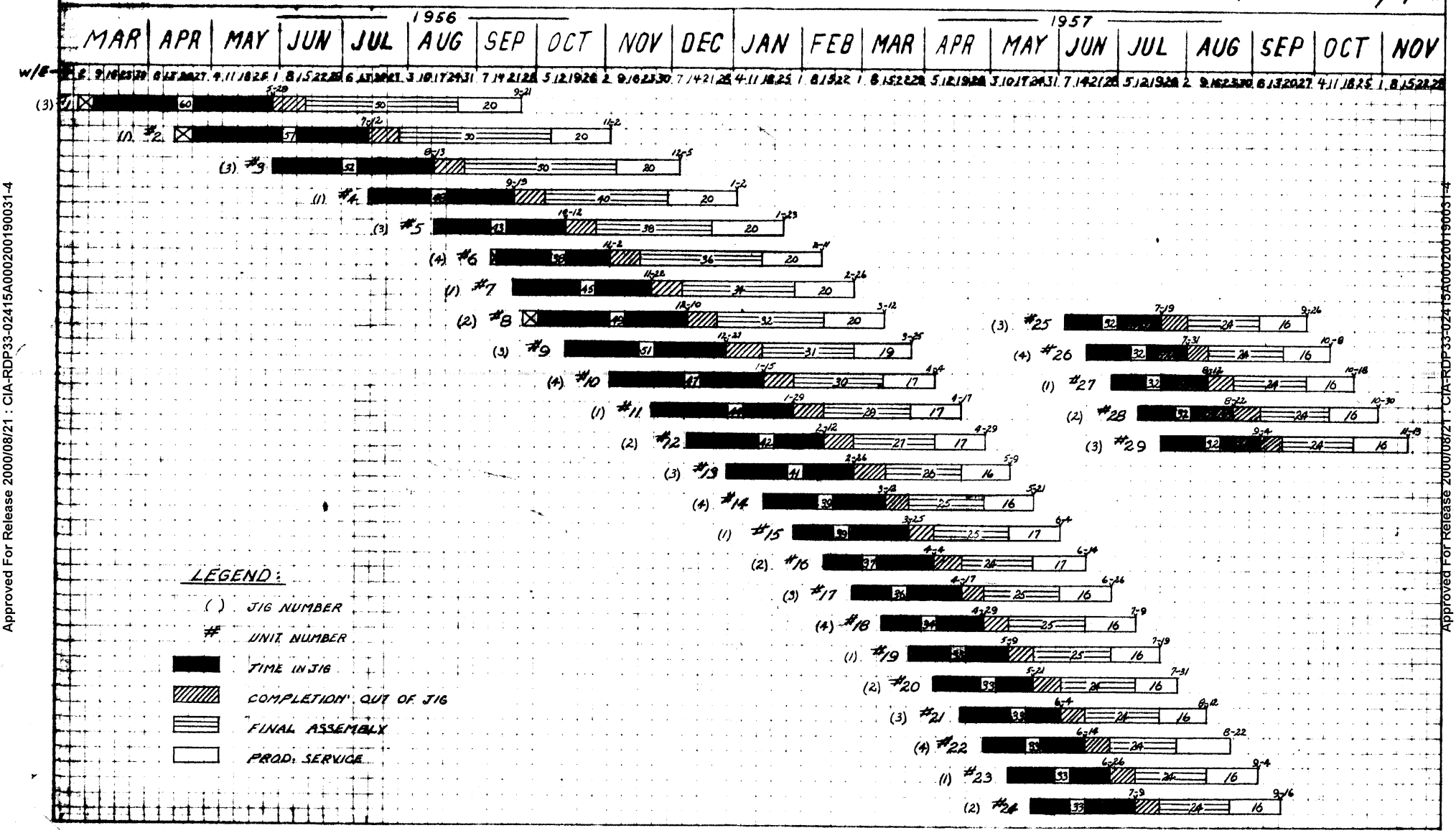
MODEL _____

ENG. SCHED. PLAN _____

TITLE MAIN FUSELAGE - FINAL ASSEMBLY - PROD. SERVICE SCHEDULE

PREPARED BY G. G. CANNON DATE 1-30-56

APPROVED BY _____ DATE 1/31/56



Form 6471D

Approved For Release 2000/08/21 : CIA-RDP33-02415A000200190031-4

FIGURE 1

TACTICAL COMBINATIONS

EQUIPMENT	WT. LBS	MAX POWER REQ 28VDC AMPS	MAX POWER REQ 400~ 3φ VA	AVAIL. DATE	MATING A/C	BASIC PHOTO	PHOTO + I & III RCVRS	SYSTEM IV	APQ 56	APQ 56 + PHOTO
DRIFT SIGHT + SEXTANT	45+15	4		9/15/55	AIRCRAFT 341 THRU 348; AIRCRAFT 349 THRU 360	X	X	X		
TRACKER	49	4		9/15/55		X	X	X	X	X
A1 CAMERAS	358	48		10/17/55						(143) X
A2 CAMERAS	334	26		9/15/55		X	X			
B CAMERA	383	48		1/2/56						
C CAMERA	391	48		9/1/56						
S + X RCVRS I	17	1		9/15/55		X	X			
COMM. & NAVIG. II	171	21	350 (+600 PULSE)	6/1/56		X	X	X	X	X
VHF RCVR III	32		280	3/15/56			X			
RADAR RCVRS IV	100		2000	9/1/56	355-360			X		
APQ 56	520	5	2508	9/1/56	349-351				X	X
EQUIPMENT TOTAL WEIGHT, LBS.						706	738	745	700	313
MAX. POWER REQS — 28VDC AMPS						59	59	29	30	18
MAX. POWER REQS — 400~ 3φ VA						350	630	2350	2858	2858
MAX. POWER REQS — (1+MONO PULSE)						950	1230	2350	3458	3458

10/3/55 [illegible]

SYSTEM II WEIGHT STATUS

Cockpit	-54 Printer	3.00
	-65 Input	2.06
Equipment Bay	-68A Tuner	21.22
	J Box	2.00
Reefer Comp't.	-24 Navig. Comp.	16.95
	-69 Power Supply	22.75
	-63 Computer	19.07
	-67 Exciter	68.81
	-68B Transmitter	
	-51 Receiver	7.94
	-29 Programmer	2.00
	Compressor	5.55
System II Hardware Total		171.35 lbs.
Antenna		1.50
Wiring, Plugs		19.03
Structure Provisions		6.43
Total System II as Installed		198.31 lbs.

The allocation of equipment and airplane serials is submitted here in Figure 3 to indicate our present fabrication plans. It is subject to change and is shown here in order to establish a common base.

LOWER HATCHES -

As a result of operational practices at the training base and the desire for more flexible use of the airplane, the types and numbers of lower hatches to be fabricated has been revised.

LOWER HATCH ASSEMBLIES

	BASIC	A1	B	C	IV
Operational	29	20	6	6	5
Spares	6		1	1	

The basic hatches are modified to include mounting provisions for the tracker. This has proven to be an extremely useful camera for use with equipment other than that requiring camera hatches. This will be a factory installation for all SP 1914 airplanes.

The use of two separate hatches for the A1 and A2 camera equipment has been shown to be an unnecessary complication. The A1 hatches will be used with both A1 and A2 equipment.

FIGURE 2

25X1A

AIRCRAFT WEIGHT -

The basic aircraft weight situation is outlined below. The weight of this aircraft is still going up, primarily due to added or overweight equipment. This growth must be stopped or the basic mission of the aircraft will be degraded. Note that the aircraft gross weight for the zero fuel condition has increased as much as 249 pounds since the last report made in January for SP 1913.

WEIGHT EMPTY STATUS

Weight Empty as per Progress Report #7, SP 1913	9968.1
Less the following:	
Paint - Not a requirement	(-85.0)
Actual Weight of -31 Engine	(-59.0)
Added:	
Sun Shade	1.8
Clock	0.8
Landing Lights	4.2
20V035 Battery in lieu of (2) 20V0 4's	62.2
Fuselage Nose Redesign for Package III Antenna	10.9
Provisions for Package II & Cockpit Wiring	8.2
Cockpit Fan	1.5
Rear View Mirror	0.9
Misc. Changes	2.9
WEIGHT EMPTY TOTAL (-31 Engine)	9917.5
25X1A [redacted] (6 airplanes only)	+27.0
25X1A WEIGHT EMPTY, [redacted] AIRCRAFT	9944.5

GROSS WEIGHT STATUS

USEFUL LOAD	-37 ENGINE	-31 ENGINE
Crew	285	285
Unusable Fuel	71	71
Oil - Trapped	26	26
- Engine	120	65
Oxygen (3) 514 cu. in.	61	61
Tactical Load	691	691
TOTAL USEFUL LOAD	1,254	1,199
WEIGHT EMPTY	10,276	9,918
Zero Fuel Gross Weight	11,530	11,117
Progress Report #7 SP 1913		
Zero Fuel Gross Weight	11,281	10,906
Weight Growth	249	211

MANUFACTURING -

The following summary indicates the manufacturing status of the Bakersfield operation. It was activated as an Engineering Experimental Manufacturing installation on January 3, 1956. Starting with a work force of approximately 30 direct and indirect people, it has built up to a total of 220 employees. The hiring rate will continue at approximately ten per week through October at which time the work force will level off at 450 employees. All hiring is being done in the Bakersfield area with the exception of approximately 30 key supervisory, engineering and administrative personnel. It consists of a 200' x 400' manufacturing building located on a 17 acre plot with ample access to the Kern County Airport, which immediately adjoins the property. A separate 30' x 80' storage building and a 30' x 80' canteen for employees have been provided. All construction has been done with a view to affording maximum security protection.

This is primarily an assembly plant with practically all fabrication work being done at Burbank. It is currently undertaking the assembly of all major components. It is now supplying assemblies to Burbank for the remaining airplanes for contract SP 1913 and will ultimately contribute approximately ten to fifteen per cent of the total man-hours effort on that contract. This is in addition to the major portion of the sheet metal assembly and final assembly on contract SP 1914 articles and spares. The major assembly work is as follows:

Main Fuselage -

The main fuselage for 361 will leave the jig on May 18, 1956, one week ahead of schedule.

Wing Assemblies -

Bakersfield will furnish nine wing assemblies to Burbank for SP 1913. The first set of wings have been pulled from the jigs and are currently in tank seal. These wings will be assembled to 354. Wings for 361 will be out of the jigs and ready for tank seal by May 16, 1956.

Aft Fuselage -

Six aft fuselage assemblies have been delivered to Burbank and final assembly operations have started on the aft fuselage for 361. A total of fifty-three fuselages for SP 1913 and SP 1914 including spares will be built.

Empennage -

Empennage production is proceeding toward the ultimate rate of one complete empennage every eight days.

COSTS -

The overall expenditures on contract SP 1914 to March 29, 1956 are $948,000.